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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,445	01/02/2002	Katsuhiko Goto	027260-507	8144

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EXAMINER

SONG, SARAH U

ART UNIT PAPER NUMBER

2874

DATE MAILED: 12/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/032,445	Applicant(s) GOTO, KATSUHIKO	
	Examiner Sarah Song	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 13-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-12 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>0402</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election without traverse of Group I, claims 1-12 in Paper filed September 3, 2003 is acknowledged.
2. Claims 13-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in Paper filed September 3, 2003.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The prior art documents submitted by the applicant in the Information Disclosure Statement filed on April 3, 2002 have all been considered to the extent possible and made of record (note the attached copy of form PTO-1449).

Specification

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

6. Claim 1 is objected to because of the following informalities: In claim 1, line 10, Examiner suggests changing "having" to -being-. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Blonder et al. (U.S. Patent 5,179,609).** Blonder et al. discloses an optical module comprising: a photo receiver 14 (see claim 15) having a receiving surface (inherent); a first positioning member 12 having a side surface 26 to which said photo receiver 14 is secured; and a second positioning member 30 having a first groove 34 formed in an upper surface 39 thereof for positioning an optical fiber 32, and a second groove 52 formed in said upper surface 39 thereof, said second groove extending from a side surface 44 of said second positioning member to said first groove 34 and being connect to said first groove , said photo receiver 14 being partially housed in said second groove 52 (see Figure 8), and said side surface 26 being secured (i.e. provided with a “fixed attachment”, see last lines of claim 1) to said side surface of said second positioning member.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. **Claims 2-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blonder et al. as applied to claim 1 above, and further in view of Tachigori (U.S. Patent 6,042,276).** Blonder discloses fiducial marks (position indicators) 20, 22, 40 and 42. Blonder does not explicitly disclose that the fiducials substantially indicate a position of the center of a light spot which is to be produced on the receiving surface of the photo receiver by light emitted out of an end of the optical fiber positioned by the first groove, that they substantially indicate an intersection where an optical axis of the optical fiber intersects with a plane including the side surface of the second positioning member, or that they indicate a center of the receiving surface. Tachigori discloses visual alignment patterns that are formed symmetrically with respect to the fiber receiving groove and the optical axis of the optical fiber, and with respect to the photo-receiving surface. One of ordinary skill in the art would have recognized that the optical axis of the optical fiber would also correspond to the center of a light spot, which is to be produced on the receiving surface by light emitted out of an end of the optical fiber, and thus indicating an intersection where an optical axis of the optical fiber intersects with a plane including the side surface of the second positioning member. One of ordinary skill in the art would have also recognized that the symmetrically placed visual alignment patterns indicate the center of the receiving surface of the photo receiver as well. It is noted that the visual alignment patterns of the photo receiver are in the vicinity of the receiving surface. One of ordinary skill in the art would have found it obvious to space the fiducials of Blonder et al. symmetrically about the optical fiber groove, optical axis, and the photo receiver, as taught by Tachigori to substantially indicate the center of a light spot, the optical axis of the optical fiber, the intersection of the optical axis with a plane

including the side surface of the second positioning member, and the center of the receiving surface of the photo receiver. One of ordinary skill in the art would have been motivated to space the fiducials of Blonder to ensure an accurate positional relationship between the optical device and the optical fiber. See Figures 3, 6, 7 and 9; column 3, lines 16-35.

11. Regarding claims 4 and 5, Blonder suggests grooves. It is noted that the grooves and the detents of Blonder et al. have the same cross-sectional shape, such as a V-shaped cross section.

12. **Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blonder et al. as applied to claim 1 above, and further in view of Sakaino et al. (U.S. Patent 5,909,523).** Blonder et al. does not specifically disclose the first groove to be sloped relative to the surface of the second positioning member to which said side surface of the first positioning member is secured. Sakaino et al. discloses a groove 81c that is in a sloped orientation with respect to the side surface of a block 21 having a photo receiver mounted thereon. Sakaino et al. discloses that such a positional relationship minimizes back reflections from the receiving surface of the photo receiver to the fiber (column 9, lines 51-57). One of ordinary skill in the art would have also recognized that the structural relationship disclosed by Sakaino et al. is equivalent to one where the first groove of Blonder et al. is sloped relative to said side surface of said second positioning member of Blonder et al. to which said side surface of said first positioning member of Blonder et al. is secured. Therefore, one of ordinary skill in the art would have found it obvious to provide the first groove of Blonder et al. sloped relative to the side surface of the second positioning member to reduce back reflections.

13. **Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blonder et al.** Blonder et al., discloses the claimed invention, but does not explicitly disclose the first and second positioning members to be bonded together with an adhesive. Adhesive bonding is well known to those of ordinary skill in the art. Therefore, it would have been obvious to one having ordinary skill in the art to bond the side surfaces of the first and second positioning members with adhesive to provide a rugged structure. Furthermore, it would have been obvious to bond the bottom surfaces of both positioning members to an inner wall of a package to secure the device in a hermetic dust-free environment.

Allowable Subject Matter

14. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not disclosed the claimed invention wherein the first positioning member is so sized that a bottom surface thereof perpendicular to said side surface thereof to which said photo receiver is secured is higher than a bottom surface of said second positioning member which is opposite to said upper surface of said second positioning member in which said first groove is formed. The prior art of record does not disclose or reasonably suggest the modification to arrive at the invention of claim 9.

Conclusion

16. Any inquiry concerning the merits of this communication should be directed to Examiner Sarah Song at telephone number 703-306-5799. Any inquiry of a general or

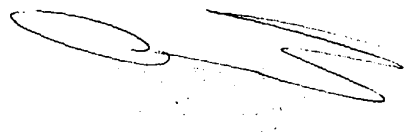
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clerical nature, or relating to the status of this application or proceeding should be directed to the receptionist at telephone number 703-308-0956 or to the technical support staff supervisor at telephone number 703-308-3072.

Sarah A. Long
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A handwritten signature, possibly reading "Sarah A. Long", written in a cursive style.